

Adding and Subtracting Fractions

Work with your partner to write down EVERYTHING you know about how to ADD and SUBTRACT fractions!

Adding Fractions,

1. Common den.

2. + numerators

3. Simplify

$$\begin{array}{r}
 9 \overline{) 11} \\
 \underline{-9} \\
 2
 \end{array}
 \begin{array}{l}
 \text{R2} \\
 + 4\frac{5}{9} = \frac{5}{9}
 \end{array}
 + 13\frac{5}{12} + 16\frac{7}{8}$$

$$\begin{array}{r}
 10\frac{1}{9} = 11\frac{2}{9}
 \end{array}$$

Subtracting Fractions

1. Get **common denominators**
2. Subtract (if you cannot, regroup, then subtract)
3. **Simplify** answer

Examples:

$$\begin{array}{r}
 21\frac{7}{10} \\
 - 9\frac{3}{8} \\
 \hline
 \end{array}
 =
 \begin{array}{r}
 49\frac{8}{4} \\
 - 4\frac{3}{4} \\
 \hline
 45\frac{5}{4} \\
 = 45\frac{15}{4}
 \end{array}$$

$$\begin{array}{r}
 11\cancel{12}\frac{1}{4} = 1\frac{1}{4} \\
 - 7\frac{1}{2} = \frac{2}{4} \\
 \hline
 4\frac{3}{4}
 \end{array}$$

HOMEWORK

**#2 Fractions Mastery WKSH...
SHOW ALL WORK!**

3) Multiplying Fractions

- ⟨ Change any mixed numbers to improper fractions
- ⟨ Cross-cancel if you can
- ⟨ Multiply numerators
- ⟨ Multiply denominators
- ⟨ Simplify final answer

Examples:

$$\frac{2}{5} \cdot 3\frac{3}{4}$$

$$2\frac{2}{3} \cdot 4\frac{1}{5}$$

4) Dividing Fractions

- ⟨ Change any mixed numbers to improper fractions
- ⟨ Convert the second fraction to its reciprocal
- ⟨ Change the division to multiplication
- ⟨ Multiply the fractions
- ⟨ Simplify the final answer

Examples: $10\frac{2}{3} \div 2\frac{1}{2}$ $18\frac{3}{4} \div 6\frac{1}{4}$